

Appl No. 10/810,728
Amdt. Dated August 9, 2006
Reply to Office Action of May 10, 2006

Attorney Docket No. 81872.0060
Customer No. 26021

REMARKS/ARGUMENTS

This application has been carefully reviewed in light of the Office Action dated May 10, 2006. Claims 1 and 10 have been amended. New Claims 20 and 21 have been added. Claims 1 and 10 are the independent claims. Claims 1-21 are pending in the application. Reexamination and reconsideration of the application are respectfully request.

Applicant believes the foregoing amendments comply with requirements of form and thus may be admitted under 37 C.F.R. § 1.116(b). Alternatively, if these amendments are deemed to touch the merits, admission is requested under 37 C.F.R. § 1.116(c). In this connection, these amendments were not earlier presented because they are in response to the matters pointed out for the first time in the Final Office Action.

Lastly, admission is requested under 37 C.F.R. § 1.116(b) as presenting rejected claims in better form for consideration on appeal.

CLAIM REJECTION UNDER 35 U.S.C. § 102(B)

Claims 1, 6-8, 10, 15, and 18 stand rejected under 35 U.S.C. § 102(b) as being unpatentable over Ogawa (U.S. Patent No. 4,381,469). Applicants respectfully traverse the rejection.

The present invention is directed to a surface acoustic wave apparatus used in a mobile communication device. Independent amended Claim 1 is recited below:

*A surface acoustic wave apparatus formed by
mounting a surface acoustic wave element to a circuit
board, wherein:*

*said surface acoustic wave element includes a
piezoelectric substrate, an electrode, formed on one main*

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surface of said piezoelectric substrate, to be at a ground potential, and an IDT electrode formed on said one main surface of said piezoelectric substrate;

said IDT electrode is an electrode comprising paired comb-teeth-shaped electrodes, each having plural electrode fingers, oppositely placed in such a manner that the electrode fingers of one comb-teeth-shaped electrode are positioned between the electrode fingers of the other comb-teeth-shaped electrode;

either of said comb-teeth-shaped electrodes forming said IDT electrode is connected to said electrode to be at the ground potential via a resistor formed entirely on said one main surface of said piezoelectric substrate; and said resistor is made of a semiconductor.

Applicants respectfully submit that Ogawa fails to teach or suggest the subject matter that is claimed by Applicants Claim 1. Specifically Ogawa fails to either teach or suggest "*said electrode to be at the ground potential via a resistor formed entirely on said one main surface of said piezoelectric substrate*", as required by amended independent Claim 1.

Applicants respectfully submit that it is an advantage of the present invention that a resistor 40 is formed entirely on one main surface of the piezoelectric substrate. As such, the resistor can be formed at the same time as when the IDT electrodes are formed on the main surface of the piezoelectric substrate, resulting in an advantageous simpler manufacturing process. (See, *Specification, pg. 8, line 21 – pg. 9, line 3; pg. 33, line 3 – pg. 40, line 8; Fig. 10*)

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Ogawa discloses an electrode 6a, of the output interdigital transducer 6, and the hermetic base 1 being forced to the ground potential [via resistor 19], as shown in FIG. 1. The resistor 19 is formed by painting a resistive paste and by baking the same. A ground electrode 7 is formed on the other main surface of the ceramic plate 4 opposite the output interdigital transducer 6. The surface of the ground electrode 7 is fixed to the hermetic base 1 with a conductive adhesive agent 3. The electrode 6a and the hermetic base 1 are shown, in figs 1A and 1B, to electrically connected by means of a resistor 19 and thus, grounded via ground electrode 7. (See, Ogawa, Fig. 1A; Fig. 1B; Fig. 3; col. 8, lines 14-20, 50-59)

Ogawa also discloses, in Figs. 1 and 3, that the resistor 19 must begin to be formed on the main face of the ceramic plate 4 and then continue uninterrupted along a side face of ceramic plate 4 in order to force electrode 6a and the hermetic base 1 to be at ground potential. By requiring the resistor 19 to be formed on the side face of ceramic plate 4, Ogawa cannot teach or suggest a resistor that if formed entirely on one main surface of a piezoelectric substrate.

Thus, Ogawa fails to teach or suggest "*said electrode to be at the ground potential via a resistor formed entirely on said one main surface of said piezoelectric substrate*", as required by amended Claim 1.

Since the cited reference fails to disclose, teach or suggest the above features recited in amended independent Claim 1, the reference does not anticipate or render obvious the invention which is the subject matter of that claim.

Accordingly, independent Claim 1 is believed to be in condition for allowance and such allowance is respectfully requested.

Applicant respectfully submits that amended independent Claim 10 is allowable for the least the same reasons as those discussed in connection with amended independent Claim 1.

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Claims 6-9, 15 and 18 depend either directly or indirectly from amended independent Claims 1 and 10, and thus include each of the elements and limitation thereof, as such those claims are patentable over Ogawa for at least the same reasons as those stated with regard to amended independent Claims 1 and 10 and are believed to be in condition for allowance. Accordingly, withdrawal of the rejections and allowance of Claims 6-9, 15 and 18 is respectfully requested.

CLAIM REJECTION UNDER 35 U.S.C. § 103(A)

Claims 2-5, 11-14, and 16-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogawa in view of Sugai (U.S. Patent No. 5,028,101). Claims 9 – 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogawa in view of the official notice taken by the Office Action in paragraph 5. Applicants respectfully traverse the rejections.

Claim 2-5 and 9-19 depend from amended independent Claims 1 and 10 and thus include each of the elements and limitations thereof. The above claim rejections are based in part on the contention that Ogawa discloses the elements of amended independent Claims 1 and 10, from which those claims depend. Amended independent Claims 1 and 10 are patentably distinct from Ogawa for at least the reasons discussed above.

The ancillary Sugai was cited for its relevance regarding poly crystalline silicone resistors. The official notice taken by the Office Action in paragraph 5 was regarding communications devices in general. As such, both Sugai and the official notice fail to remedy the deficiencies of Ogawa

Therefore, since the combinations cited by the Office Action fails to teach and/or suggest each limitation of Claim 2-5 and 9-19. Claim 2-5 and 9-19 are patentable over the cited references for at least the reasons stated above.

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Withdrawal of the rejection and allowance of Claim 2-5 and 9-19 is respectfully requested.

New Claims 20 and 21 depend either directly from amended independent Claims 1 and 10, and thus include each of the elements and limitation thereof, as such new Claim 20 and 21 are patentable for at least the same reasons as those stated with regard to amended independent Claims 1 and 10. Accordingly new Claims 20 and 21 are believed to be in condition for allowance, and such allowance is respectfully requested.

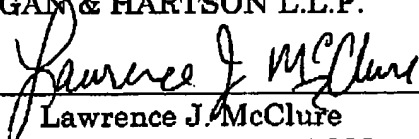
In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 337-6700 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1814.

Respectfully submitted,

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